

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P332090-830

Luminaire Tested: **S123DIW-S340D460U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332090-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S340D460U830-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 460 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3107.6 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

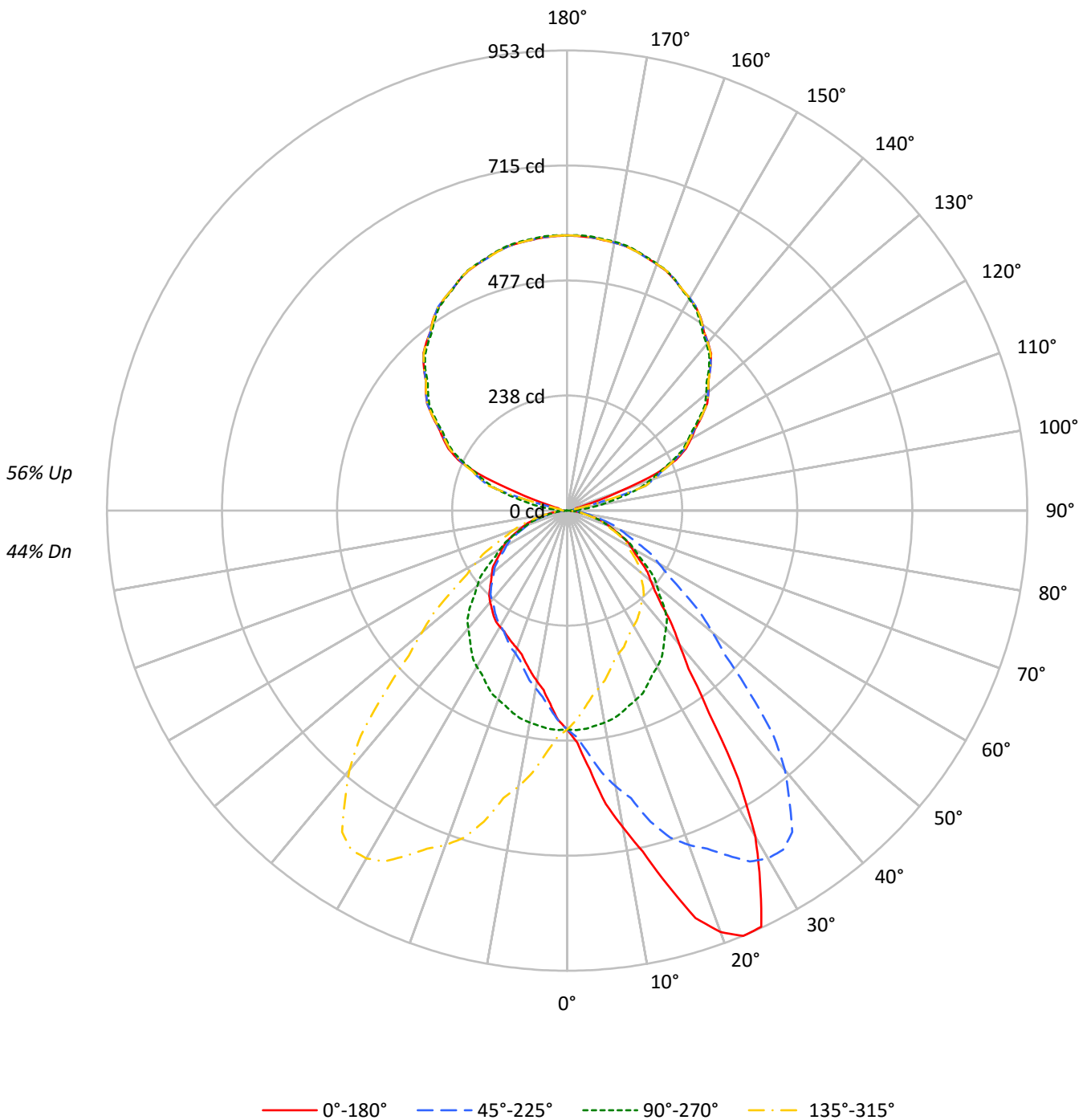
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44					44			
1	97	93	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38					38			
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	40	38	37	32					32			
3	81	71	64	59	74	66	59	54	55	50	47	45	42	39	36	33	32	27					27			
4	74	63	56	50	67	58	52	46	49	44	40	40	36	33	32	29	27	23					23			
5	68	56	48	43	62	52	45	40	44	38	34	36	32	29	29	26	24	21					21			
6	62	51	43	37	57	47	40	35	39	34	30	33	29	25	26	23	21	18					18			
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16					16			
8	53	41	34	29	49	38	32	27	33	27	23	27	23	20	22	19	17	14					14			
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13					13			
10	46	35	27	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12					12			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4878	4878	4878	4878
5°	5817	4900	4341	4900
10°	7282	4875	3922	4875
15°	8931	4835	3651	4835
20°	10639	4774	3477	4774
25°	11297	4700	3437	4700
30°	9684	4645	3455	4645
35°	6734	4568	3491	4568
40°	5073	4477	3481	4477
45°	4211	4341	3436	4341
50°	3773	4068	3404	4068
55°	3526	3772	3363	3772
60°	3309	3460	3328	3460
65°	3110	3156	3222	3156
70°	2917	2807	3068	2807
75°	2612	2458	2816	2458
80°	2287	2015	2424	2015
85°	1791	1470	1630	1470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	1.4
10°-20°	143.2	4.6
20°-30°	240.3	7.7
30°-40°	272.0	8.8
40°-50°	244.0	7.9
50°-60°	196.9	6.3
60°-70°	137.2	4.4
70°-80°	72.1	2.3
80°-90°	19.2	0.6
90°-100°	20.7	0.7
100°-110°	98.8	3.2
110°-120°	237.2	7.6
120°-130°	302.1	9.7
130°-140°	322.8	10.4
140°-150°	301.8	9.7
150°-160°	243.5	7.8
160°-170°	157.1	5.1
170°-180°	54.2	1.7
0°-30°	428.1	13.8
0°-40°	700.1	22.5
0°-60°	1140.9	36.7
0°-90°	1369.5	44.1
90°-120°	356.7	11.5
90°-150°	1283.4	41.3
90°-180°	1738.0	55.9
0°-180°	3107.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	453	453	453	453	453	
5°	538	454	402	454	538	56
15°	801	434	328	434	801	231
25°	951	396	289	396	951	417
35°	512	348	266	348	512	333
45°	277	285	226	285	277	219
55°	188	201	179	201	188	169
65°	122	124	126	124	122	122
75°	63	59	68	59	63	67
85°	14	12	13	12	14	17
90°	13	0	13	0	13	6
95°	16	26	16	26	16	13
105°	19	126	19	126	19	43
115°	249	237	249	237	249	230
125°	340	334	340	334	340	304
135°	420	415	420	415	420	324
145°	484	479	484	479	484	302
155°	527	528	527	528	527	243
165°	556	557	556	557	556	157
175°	568	570	568	570	568	54
180°	570	570	570	570	570	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	481.0	480.6	479.8	480.4	479.0	477.1	476.9	475.1	470.0	469.8	468.3
5°	538.4	536.7	536.4	536.2	533.1	529.0	521.0	520.4	509.8	504.6	498.2
7.5°	612.8	613.7	610.5	607.8	598.3	592.1	583.6	572.8	559.9	546.7	538.0
10°	666.2	673.4	664.5	658.3	652.6	641.9	629.3	613.7	598.1	579.9	566.1
12.5°	723.5	727.0	725.2	719.4	710.6	694.2	672.0	654.8	640.5	610.1	597.9
15°	801.4	814.8	806.3	786.6	786.9	771.4	742.4	710.6	693.6	667.0	630.8
17.5°	884.6	886.2	882.6	866.1	855.2	833.7	806.9	776.5	742.2	710.0	671.6
20°	928.8	927.5	919.8	911.3	892.4	875.7	846.5	812.5	768.5	736.9	694.9
22.5°	953.4	951.2	947.5	940.4	924.7	906.8	880.5	843.4	801.5	758.0	709.5
25°	951.2	954.0	954.5	952.5	947.1	936.3	915.7	886.0	844.3	788.2	737.8
27.5°	865.2	869.2	880.9	891.4	903.0	914.8	913.2	898.5	867.6	819.3	757.5
30°	779.1	770.2	792.0	819.4	838.1	871.1	889.5	890.6	873.3	831.8	771.6
32.5°	659.6	669.3	678.9	712.7	753.5	790.4	827.2	856.7	860.1	832.5	779.9
35°	512.5	524.6	542.2	559.7	603.6	641.4	706.0	762.1	806.9	812.8	780.6
37.5°	413.0	419.0	430.1	447.7	476.4	521.2	571.1	642.2	707.1	755.4	757.4
40°	361.0	362.8	375.2	388.6	411.9	448.8	493.8	556.7	634.3	701.8	729.9
42.5°	322.0	325.8	331.2	344.0	362.6	390.3	432.2	484.1	555.3	632.9	687.9
45°	276.6	281.1	284.4	292.9	306.1	324.8	353.9	401.4	455.6	535.7	609.7
47.5°	246.8	247.0	249.5	256.0	264.9	279.0	299.6	330.1	379.8	444.9	520.8
50°	225.3	228.8	229.7	234.7	241.8	252.0	269.2	295.1	335.9	393.0	462.9
52.5°	210.2	211.2	213.7	217.4	223.5	231.5	246.4	266.6	298.7	347.4	411.6
55°	187.9	187.9	190.4	193.2	196.7	204.0	213.9	228.8	253.2	291.0	344.1
57.5°	167.4	168.5	170.2	171.1	174.1	178.9	187.1	198.5	216.6	245.7	287.9
60°	153.7	155.7	155.4	157.2	159.9	163.6	170.6	179.8	196.0	219.3	255.0
62.5°	141.8	141.7	141.6	143.7	146.3	149.9	154.5	162.4	176.3	196.9	227.2
65°	122.1	121.7	123.2	124.5	125.4	128.0	131.5	138.6	147.8	163.2	186.6
67.5°	104.6	103.3	104.2	104.6	106.1	108.2	111.5	115.8	123.1	135.4	153.2
70°	92.7	91.5	91.3	91.8	93.1	94.6	97.1	101.2	108.0	117.9	130.8
72.5°	80.4	79.6	79.6	80.6	81.2	82.2	83.9	87.7	93.1	100.6	112.6
75°	62.8	62.8	62.8	63.1	63.7	64.6	65.9	67.9	72.0	77.3	85.4
77.5°	47.0	47.0	46.8	46.8	47.7	48.1	48.4	50.2	52.6	56.1	62.0
80°	36.9	35.8	36.2	36.9	37.3	37.5	38.2	38.6	40.6	42.6	46.8
82.5°	27.4	26.5	26.6	27.6	27.7	27.9	28.6	29.1	29.9	31.7	33.9
85°	14.5	14.5	14.7	14.7	14.9	14.7	15.4	15.6	15.6	16.7	18.0
87.5°	7.8	7.4	7.5	7.7	7.4	7.6	7.7	7.8	7.9	8.0	7.9
90°	12.7	12.5	12.3	12.2	12.0	11.7	11.3	10.9	10.6	10.2	9.0
92.5°	14.0	13.9	13.9	13.8	13.6	13.3	12.6	12.1	11.4	10.8	9.9
95°	16.1	16.1	16.1	16.1	16.1	15.7	15.1	14.4	13.8	13.1	12.1
97.5°	17.4	17.3	17.2	17.2	17.1	16.7	15.9	15.2	14.4	13.7	20.5
100°	17.8	17.7	17.6	17.5	17.4	17.0	16.2	15.5	14.7	13.9	28.7
102.5°	18.1	17.9	17.8	17.6	17.4	18.6	20.8	23.2	25.5	27.9	43.9
105°	18.7	18.5	18.3	18.1	17.9	26.1	42.8	59.4	76.1	92.7	101.2
107.5°	58.5	71.1	83.6	96.1	108.8	121.1	133.4	145.5	157.8	169.9	168.6
110°	116.5	129.9	143.4	156.8	170.3	178.5	181.6	184.7	187.8	191.0	189.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	199.8	202.6	205.5	208.3	211.1	212.5	212.4	212.4	212.4	212.4	211.3
115°	249.0	248.6	248.3	247.9	247.5	246.9	245.9	245.0	244.0	243.1	242.2
117.5°	276.6	276.5	276.4	276.4	276.3	275.9	275.1	274.4	273.6	272.9	272.5
120°	295.6	295.6	295.6	295.6	295.6	295.2	294.5	293.7	292.9	292.2	291.9
122.5°	314.2	314.1	314.1	314.0	313.9	313.6	313.1	312.5	312.0	311.5	311.1
125°	340.4	340.3	340.1	339.9	339.7	339.5	339.3	339.1	338.9	338.7	338.4
127.5°	365.7	365.9	366.1	366.3	366.5	366.4	366.1	365.8	365.5	365.2	364.8
130°	381.9	382.1	382.3	382.5	382.7	382.6	382.2	381.8	381.4	381.1	380.8
132.5°	396.9	397.1	397.4	397.7	397.9	397.8	397.5	397.1	396.7	396.3	396.1
135°	419.6	419.9	420.2	420.5	420.8	420.8	420.5	420.2	419.9	419.6	419.2
137.5°	441.1	441.3	441.5	441.7	441.9	441.7	441.2	440.8	440.4	439.9	439.7
140°	453.9	454.1	454.3	454.5	454.7	454.6	454.2	453.8	453.5	453.1	452.8
142.5°	465.8	466.1	466.4	466.6	466.8	466.8	466.6	466.3	465.9	465.6	465.3
145°	484.0	484.0	484.0	484.0	484.0	483.9	483.7	483.5	483.3	483.1	483.0
147.5°	497.6	498.0	498.4	498.9	499.3	499.5	499.3	499.1	498.9	498.7	498.5
150°	507.7	508.0	508.3	508.6	508.9	508.9	508.7	508.5	508.3	508.1	507.9
152.5°	515.9	516.3	516.7	517.2	517.6	517.6	517.3	517.0	516.6	516.3	516.1
155°	527.3	527.7	528.3	528.9	529.4	529.5	529.0	528.6	528.1	527.6	527.5
157.5°	536.8	537.5	538.3	538.9	539.7	539.8	539.2	538.7	538.1	537.5	537.6
160°	542.9	543.6	544.2	544.9	545.5	545.5	545.0	544.4	543.8	543.3	543.4
162.5°	548.7	549.2	549.8	550.4	551.0	550.9	550.4	549.7	549.0	548.4	548.5
165°	555.6	556.3	556.9	557.5	558.2	558.2	557.4	556.7	555.9	555.2	555.3
167.5°	560.6	561.4	562.1	562.8	563.5	563.5	562.8	562.1	561.4	560.6	560.6
170°	563.6	564.4	565.1	565.9	566.7	566.7	565.9	565.1	564.4	563.6	563.6
172.5°	565.3	566.2	566.9	567.8	568.6	568.6	567.9	567.1	566.4	565.6	565.6
175°	567.9	568.6	569.4	570.1	570.9	570.9	570.2	569.6	568.9	568.3	568.2
177.5°	568.6	569.4	570.1	570.9	571.7	571.7	571.1	570.5	569.9	569.3	569.2
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	467.2	465.9	464.5	462.0	459.9	456.9	456.0	455.0	451.8	449.0	446.9
5°	495.8	490.5	482.9	475.8	470.1	462.4	458.1	453.5	446.9	440.9	436.1
7.5°	525.7	515.3	503.3	490.5	478.4	466.8	457.5	449.1	439.9	431.2	424.3
10°	549.4	534.4	517.7	499.7	484.4	469.5	456.9	446.0	434.1	423.8	415.2
12.5°	576.5	554.3	531.3	509.4	491.3	470.5	455.3	441.4	427.9	415.6	406.0
15°	608.4	580.3	553.1	523.0	495.4	469.5	451.5	433.9	418.3	405.6	393.2
17.5°	637.6	605.8	569.9	533.3	499.9	469.2	444.0	424.1	404.6	389.1	376.8
20°	654.1	617.9	577.3	539.3	502.4	468.2	440.5	416.8	395.7	379.2	365.4
22.5°	668.4	625.9	583.9	543.3	502.2	465.3	433.9	409.5	386.7	370.6	355.9
25°	683.2	632.4	590.2	542.6	496.7	458.5	423.4	395.7	372.9	353.9	338.8
27.5°	695.8	632.0	581.9	530.7	488.0	449.7	412.2	382.5	358.3	337.7	322.3
30°	704.2	632.8	573.3	522.6	479.6	440.1	403.6	373.7	348.3	327.4	312.9
32.5°	709.5	632.3	565.4	511.3	466.2	431.2	394.3	363.4	337.1	316.7	302.7
35°	712.6	628.4	551.8	488.1	444.7	410.6	379.7	347.6	320.2	301.0	285.2
37.5°	706.3	620.3	536.0	465.7	418.1	384.7	358.5	331.3	305.0	284.0	270.3
40°	696.7	615.0	523.7	449.9	399.8	367.6	345.4	318.6	292.7	272.7	260.0
42.5°	678.3	604.4	510.2	432.3	380.9	348.6	328.2	305.8	281.3	262.5	249.8
45°	633.3	581.0	489.8	406.0	352.9	319.5	301.5	285.2	263.1	244.9	233.8
47.5°	570.8	545.9	460.5	378.2	323.6	291.5	272.8	259.8	243.6	228.8	218.3
50°	527.4	517.1	440.7	359.2	304.2	272.7	254.7	242.9	231.2	216.5	206.9
52.5°	477.4	483.7	417.5	339.6	284.3	253.4	236.5	227.1	216.5	204.3	196.0
55°	406.9	429.9	377.5	306.5	254.7	225.3	209.2	201.0	194.7	185.8	178.5
57.5°	340.9	370.2	334.1	272.5	225.6	200.3	184.9	175.9	171.9	167.2	161.5
60°	301.7	330.6	303.2	249.7	206.2	182.0	168.4	160.7	156.7	153.4	148.6
62.5°	266.7	296.1	273.1	226.5	187.0	164.7	152.8	145.2	142.2	140.5	136.4
65°	218.7	243.9	228.6	190.4	159.7	139.9	129.1	123.9	121.0	120.4	117.7
67.5°	178.0	197.2	186.1	157.9	133.7	116.7	107.5	103.0	100.9	100.6	98.6
70°	151.3	169.3	160.7	135.3	114.4	101.0	93.1	89.2	87.8	87.7	86.5
72.5°	130.5	143.1	136.3	115.1	99.0	86.8	81.0	76.8	75.4	75.7	74.9
75°	96.6	106.0	102.1	87.4	74.5	66.5	61.7	59.1	57.8	58.4	57.5
77.5°	69.6	75.5	71.9	61.7	53.7	48.1	44.5	42.9	41.7	41.7	41.3
80°	52.5	56.0	54.0	47.9	41.3	36.5	33.6	32.5	31.9	31.6	31.4
82.5°	37.4	40.3	38.0	33.8	29.3	26.4	24.8	23.4	22.9	23.0	22.8
85°	18.9	20.0	19.1	16.5	14.7	13.4	12.5	11.9	11.4	11.6	11.2
87.5°	8.0	8.0	7.2	6.3	5.7	5.0	4.8	4.3	4.1	4.3	4.3
90°	7.7	6.5	5.3	4.1	3.2	2.3	1.3	0.4	1.3	2.3	3.2
92.5°	9.0	8.1	7.2	6.8	7.1	7.4	7.6	7.9	7.6	7.4	7.1
95°	11.0	10.0	9.0	10.4	14.2	18.1	22.0	25.8	22.0	18.1	14.2
97.5°	27.1	33.9	40.7	45.0	46.8	48.4	50.1	51.9	50.1	48.4	46.8
100°	43.4	58.1	72.7	79.1	77.2	75.3	73.4	71.5	73.4	75.3	77.2
102.5°	59.9	76.0	92.0	99.3	98.0	96.6	95.3	93.9	95.3	96.6	98.0
105°	109.7	118.1	126.6	130.4	129.3	128.3	127.2	126.2	127.2	128.3	129.3
107.5°	167.3	166.0	164.7	163.5	162.7	161.9	161.1	160.2	161.1	161.9	162.7
110°	188.9	187.8	186.8	186.0	185.2	184.5	183.7	182.9	183.7	184.5	185.2



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	210.3	209.2	208.2	207.4	206.6	205.9	205.3	204.6	205.3	205.9	206.6
115°	241.4	240.5	239.7	238.9	238.4	237.8	237.2	236.7	237.2	237.8	238.4
117.5°	272.0	271.5	271.2	270.6	269.8	269.2	268.5	267.8	268.5	269.2	269.8
120°	291.6	291.3	291.1	290.5	289.6	288.8	287.9	287.1	287.9	288.8	289.6
122.5°	310.8	310.5	310.1	309.5	308.9	308.1	307.5	306.8	307.5	308.1	308.9
125°	338.0	337.6	337.2	336.7	335.9	335.2	334.4	333.7	334.4	335.2	335.9
127.5°	364.3	363.8	363.4	362.8	362.0	361.3	360.5	359.8	360.5	361.3	362.0
130°	380.4	380.0	379.7	379.1	378.3	377.6	376.8	376.1	376.8	377.6	378.3
132.5°	395.8	395.5	395.1	394.6	393.9	393.1	392.4	391.6	392.4	393.1	393.9
135°	418.9	418.5	418.1	417.6	417.1	416.5	415.9	415.4	415.9	416.5	417.1
137.5°	439.5	439.3	439.0	438.6	437.9	437.2	436.5	435.7	436.5	437.2	437.9
140°	452.5	452.2	451.9	451.6	451.0	450.4	449.9	449.3	449.9	450.4	451.0
142.5°	465.1	464.8	464.5	464.1	463.5	463.0	462.4	461.8	462.4	463.0	463.5
145°	482.8	482.6	482.4	482.0	481.4	480.7	480.0	479.4	480.0	480.7	481.4
147.5°	498.3	498.1	497.9	497.6	497.2	496.7	496.3	495.9	496.3	496.7	497.2
150°	507.7	507.6	507.4	507.2	506.9	506.6	506.3	506.1	506.3	506.6	506.9
152.5°	516.0	515.9	515.9	515.8	515.6	515.5	515.3	515.2	515.3	515.5	515.6
155°	527.4	527.4	527.3	527.4	527.5	527.6	527.8	528.0	527.8	527.6	527.5
157.5°	537.7	537.8	537.9	538.0	538.0	538.0	538.0	538.1	538.0	538.0	538.0
160°	543.5	543.6	543.7	543.8	543.8	543.9	544.0	544.1	544.0	543.9	543.8
162.5°	548.6	548.7	548.7	548.9	549.2	549.4	549.7	549.9	549.7	549.4	549.2
165°	555.3	555.4	555.5	555.7	556.0	556.3	556.6	556.9	556.6	556.3	556.0
167.5°	560.6	560.6	560.6	560.8	561.2	561.6	561.9	562.3	561.9	561.6	561.2
170°	563.6	563.6	563.6	563.8	564.2	564.6	565.0	565.3	565.0	564.6	564.2
172.5°	565.5	565.4	565.3	565.5	566.0	566.5	566.9	567.3	566.9	566.5	566.0
175°	568.1	568.0	567.9	568.1	568.5	569.0	569.5	570.0	569.5	569.0	568.5
177.5°	569.1	569.1	569.0	569.1	569.5	569.9	570.2	570.6	570.2	569.9	569.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	445.6	444.4	442.7	440.1	437.9	434.6	434.6	435.1	435.1	435.0	434.6
5°	432.2	428.9	424.9	420.3	415.5	410.6	409.7	407.9	406.7	405.8	404.7
7.5°	417.8	412.0	406.2	399.8	393.9	389.1	385.7	382.9	381.1	379.1	377.7
10°	408.2	401.0	394.2	387.4	379.8	373.9	370.2	367.6	365.6	363.8	363.0
12.5°	396.8	388.5	381.0	374.5	366.4	360.2	356.7	355.4	353.2	349.4	347.5
15°	380.1	372.4	363.4	353.5	349.6	342.1	337.9	335.9	334.6	331.8	330.9
17.5°	365.8	355.8	345.6	338.3	330.9	324.9	322.5	320.1	318.4	316.0	315.3
20°	354.4	345.4	336.2	328.3	320.6	314.0	312.0	310.3	308.5	307.5	306.5
22.5°	342.8	333.8	326.1	318.8	310.6	306.2	304.2	302.2	301.0	300.2	299.4
25°	326.5	318.6	310.0	303.5	296.9	294.0	292.7	291.6	290.7	289.6	289.4
27.5°	312.0	303.3	296.4	290.2	285.5	283.1	281.8	281.3	281.5	281.9	282.2
30°	301.0	293.1	287.5	282.2	277.8	275.6	275.3	275.3	276.3	276.4	276.9
32.5°	291.1	284.6	278.8	273.7	270.4	268.9	269.8	269.8	270.4	271.0	271.8
35°	276.4	270.7	266.4	261.9	259.1	259.8	260.2	260.6	261.7	263.1	263.9
37.5°	262.5	257.6	253.0	249.6	248.3	249.4	250.5	251.4	252.7	253.7	254.6
40°	252.5	248.7	244.4	241.3	241.8	242.4	243.3	244.4	245.5	246.2	247.0
42.5°	243.2	239.3	235.9	233.4	234.0	234.9	235.4	235.9	237.2	238.5	238.9
45°	229.0	225.9	222.9	221.3	221.8	222.3	222.6	223.3	224.4	225.3	225.6
47.5°	213.1	210.9	208.9	207.4	208.1	207.9	208.5	209.9	210.2	210.8	212.0
50°	202.9	201.0	198.5	198.0	198.0	198.0	198.3	200.0	200.0	201.0	201.8
52.5°	191.6	190.4	188.9	188.0	187.7	187.7	188.6	189.5	189.8	191.1	192.0
55°	175.0	173.7	172.4	171.7	171.3	171.7	173.4	173.9	175.0	175.7	176.3
57.5°	157.7	156.7	155.6	155.2	155.1	155.7	156.7	158.0	158.3	160.3	161.3
60°	146.3	144.7	143.8	143.8	143.4	145.3	145.0	147.1	147.6	148.9	150.4
62.5°	134.5	132.4	132.1	132.1	132.7	133.3	133.8	134.8	136.0	137.6	138.8
65°	115.5	114.4	115.9	115.7	115.3	116.6	116.6	117.7	119.0	120.6	123.0
67.5°	97.6	97.0	97.1	97.1	97.7	98.5	99.2	100.1	101.7	103.3	104.9
70°	85.4	86.1	85.0	85.9	86.5	86.7	87.2	88.5	90.2	91.3	93.1
72.5°	73.6	73.6	73.7	74.1	74.7	75.1	75.6	77.1	79.0	79.9	81.3
75°	56.6	56.5	57.1	57.1	58.2	58.6	59.1	59.8	61.5	62.8	63.9
77.5°	41.4	41.7	41.5	42.2	41.9	42.0	43.4	44.0	44.2	46.8	47.4
80°	31.2	31.6	31.9	32.0	32.2	31.9	33.4	34.0	34.0	35.5	36.7
82.5°	22.4	22.6	23.2	23.5	23.5	23.9	24.0	24.5	25.1	25.7	27.1
85°	11.2	11.9	12.1	11.9	12.1	11.6	12.3	12.5	12.7	12.7	12.7
87.5°	4.3	4.7	4.8	5.3	5.3	5.7	5.8	5.6	5.6	6.2	5.6
90°	4.1	5.3	6.5	7.7	9.0	10.2	10.6	10.9	11.3	11.7	12.0
92.5°	6.8	7.2	8.1	9.0	9.9	10.8	11.4	12.1	12.6	13.3	13.6
95°	10.4	9.0	10.0	11.0	12.1	13.1	13.8	14.4	15.1	15.7	16.1
97.5°	45.0	40.7	33.9	27.1	20.5	13.7	14.4	15.2	15.9	16.7	17.1
100°	79.1	72.7	58.1	43.4	28.7	13.9	14.7	15.5	16.2	17.0	17.4
102.5°	99.3	92.0	76.0	59.9	43.9	27.9	25.5	23.2	20.8	18.6	17.4
105°	130.4	126.6	118.1	109.7	101.2	92.7	76.1	59.4	42.8	26.1	17.9
107.5°	163.5	164.7	166.0	167.3	168.6	169.9	157.8	145.5	133.4	121.1	108.8
110°	186.0	186.8	187.8	188.9	189.9	191.0	187.8	184.7	181.6	178.5	170.3



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	207.4	208.2	209.2	210.3	211.3	212.4	212.4	212.4	212.4	212.5	211.1
115°	238.9	239.7	240.5	241.4	242.2	243.1	244.0	245.0	245.9	246.9	247.5
117.5°	270.6	271.2	271.5	272.0	272.5	272.9	273.6	274.4	275.1	275.9	276.3
120°	290.5	291.1	291.3	291.6	291.9	292.2	292.9	293.7	294.5	295.2	295.6
122.5°	309.5	310.1	310.5	310.8	311.1	311.5	312.0	312.5	313.1	313.6	313.9
125°	336.7	337.2	337.6	338.0	338.4	338.7	338.9	339.1	339.3	339.5	339.7
127.5°	362.8	363.4	363.8	364.3	364.8	365.2	365.5	365.8	366.1	366.4	366.5
130°	379.1	379.7	380.0	380.4	380.8	381.1	381.4	381.8	382.2	382.6	382.7
132.5°	394.6	395.1	395.5	395.8	396.1	396.3	396.7	397.1	397.5	397.8	397.9
135°	417.6	418.1	418.5	418.9	419.2	419.6	419.9	420.2	420.5	420.8	420.8
137.5°	438.6	439.0	439.3	439.5	439.7	439.9	440.4	440.8	441.2	441.7	441.9
140°	451.6	451.9	452.2	452.5	452.8	453.1	453.5	453.8	454.2	454.6	454.7
142.5°	464.1	464.5	464.8	465.1	465.3	465.6	465.9	466.3	466.6	466.8	466.8
145°	482.0	482.4	482.6	482.8	483.0	483.1	483.3	483.5	483.7	483.9	484.0
147.5°	497.6	497.9	498.1	498.3	498.5	498.7	498.9	499.1	499.3	499.5	499.3
150°	507.2	507.4	507.6	507.7	507.9	508.1	508.3	508.5	508.7	508.9	508.9
152.5°	515.8	515.9	515.9	516.0	516.1	516.3	516.6	517.0	517.3	517.6	517.6
155°	527.4	527.3	527.4	527.4	527.5	527.6	528.1	528.6	529.0	529.5	529.4
157.5°	538.0	537.9	537.8	537.7	537.6	537.5	538.1	538.7	539.2	539.8	539.7
160°	543.8	543.7	543.6	543.5	543.4	543.3	543.8	544.4	545.0	545.5	545.5
162.5°	548.9	548.7	548.7	548.6	548.5	548.4	549.0	549.7	550.4	550.9	551.0
165°	555.7	555.5	555.4	555.3	555.3	555.2	555.9	556.7	557.4	558.2	558.2
167.5°	560.8	560.6	560.6	560.6	560.6	560.6	561.4	562.1	562.8	563.5	563.5
170°	563.8	563.6	563.6	563.6	563.6	563.6	564.4	565.1	565.9	566.7	566.7
172.5°	565.5	565.3	565.4	565.5	565.6	565.6	566.4	567.1	567.9	568.6	568.6
175°	568.1	567.9	568.0	568.1	568.2	568.3	568.9	569.6	570.2	570.9	570.9
177.5°	569.1	569.0	569.1	569.1	569.2	569.3	569.9	570.5	571.1	571.7	571.7
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	433.4	433.2	434.4	433.6	434.4	433.2	433.4	434.6	435.0	435.1	435.1
5°	403.4	404.1	401.8	401.8	401.8	404.1	403.4	404.7	405.8	406.7	407.9
7.5°	376.6	375.7	375.8	374.6	375.8	375.7	376.6	377.7	379.1	381.1	382.9
10°	360.3	359.0	358.5	358.8	358.5	359.0	360.3	363.0	363.8	365.6	367.6
12.5°	346.8	346.6	343.7	343.7	343.7	346.6	346.8	347.5	349.4	353.2	355.4
15°	330.9	326.8	326.3	327.6	326.3	326.8	330.9	330.9	331.8	334.6	335.9
17.5°	315.0	312.7	312.9	312.3	312.9	312.7	315.0	315.3	316.0	318.4	320.1
20°	306.5	305.2	305.0	303.5	305.0	305.2	306.5	306.5	307.5	308.5	310.3
22.5°	298.8	298.4	298.5	296.8	298.5	298.4	298.8	299.4	300.2	301.0	302.2
25°	289.2	290.3	289.4	289.4	289.4	290.3	289.2	289.4	289.6	290.7	291.6
27.5°	282.7	282.7	282.2	282.2	282.2	282.7	282.7	282.2	281.9	281.5	281.3
30°	277.8	277.6	278.0	278.0	278.0	277.6	277.8	276.9	276.4	276.3	275.3
32.5°	272.9	273.1	273.2	273.4	273.2	273.1	272.9	271.8	271.0	270.4	269.8
35°	265.2	265.5	266.2	265.7	266.2	265.5	265.2	263.9	263.1	261.7	260.6
37.5°	255.0	256.0	255.8	256.1	255.8	256.0	255.0	254.6	253.7	252.7	251.4
40°	247.2	247.9	247.7	247.7	247.7	247.9	247.2	247.0	246.2	245.5	244.4
42.5°	239.3	239.8	239.2	238.9	239.2	239.8	239.3	238.9	238.5	237.2	235.9
45°	226.4	225.9	226.6	225.7	226.6	225.9	226.4	225.6	225.3	224.4	223.3
47.5°	211.9	212.4	212.5	213.2	212.5	212.4	211.9	212.0	210.8	210.2	209.9
50°	202.3	203.6	203.6	203.3	203.6	203.6	202.3	201.8	201.0	200.0	200.0
52.5°	192.7	193.3	194.3	194.2	194.3	193.3	192.7	192.0	191.1	189.8	189.5
55°	178.0	178.5	179.0	179.2	179.0	178.5	178.0	176.3	175.7	175.0	173.9
57.5°	162.9	162.7	163.7	164.1	163.7	162.7	162.9	161.3	160.3	158.3	158.0
60°	152.1	152.1	153.9	154.6	153.9	152.1	152.1	150.4	148.9	147.6	147.1
62.5°	140.7	141.5	143.2	142.3	143.2	141.5	140.7	138.8	137.6	136.0	134.8
65°	124.0	125.8	125.6	126.5	125.6	125.8	124.0	123.0	120.6	119.0	117.7
67.5°	106.6	107.7	109.3	109.4	109.3	107.7	106.6	104.9	103.3	101.7	100.1
70°	94.8	96.0	96.8	97.5	96.8	96.0	94.8	93.1	91.3	90.2	88.5
72.5°	83.4	84.0	86.1	85.2	86.1	84.0	83.4	81.3	79.9	79.0	77.1
75°	65.4	67.0	68.3	67.7	68.3	67.0	65.4	63.9	62.8	61.5	59.8
77.5°	48.4	50.0	50.5	50.0	50.5	50.0	48.4	47.4	46.8	44.2	44.0
80°	38.2	38.0	39.3	39.1	39.3	38.0	38.2	36.7	35.5	34.0	34.0
82.5°	28.0	27.8	28.4	28.6	28.4	27.8	28.0	27.1	25.7	25.1	24.5
85°	13.6	14.2	13.4	13.2	13.4	14.2	13.6	12.7	12.7	12.7	12.5
87.5°	5.6	5.7	5.5	5.4	5.5	5.7	5.6	5.6	6.2	5.6	5.6
90°	12.2	12.3	12.5	12.7	12.5	12.3	12.2	12.0	11.7	11.3	10.9
92.5°	13.8	13.9	13.9	14.0	13.9	13.9	13.8	13.6	13.3	12.6	12.1
95°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	15.7	15.1	14.4
97.5°	17.2	17.2	17.3	17.4	17.3	17.2	17.2	17.1	16.7	15.9	15.2
100°	17.5	17.6	17.7	17.8	17.7	17.6	17.5	17.4	17.0	16.2	15.5
102.5°	17.6	17.8	17.9	18.1	17.9	17.8	17.6	17.4	18.6	20.8	23.2
105°	18.1	18.3	18.5	18.7	18.5	18.3	18.1	17.9	26.1	42.8	59.4
107.5°	96.1	83.6	71.1	58.5	71.1	83.6	96.1	108.8	121.1	133.4	145.5
110°	156.8	143.4	129.9	116.5	129.9	143.4	156.8	170.3	178.5	181.6	184.7



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	208.3	205.5	202.6	199.8	202.6	205.5	208.3	211.1	212.5	212.4	212.4
115°	247.9	248.3	248.6	249.0	248.6	248.3	247.9	247.5	246.9	245.9	245.0
117.5°	276.4	276.4	276.5	276.6	276.5	276.4	276.4	276.3	275.9	275.1	274.4
120°	295.6	295.6	295.6	295.6	295.6	295.6	295.6	295.6	295.2	294.5	293.7
122.5°	314.0	314.1	314.1	314.2	314.1	314.1	314.0	313.9	313.6	313.1	312.5
125°	339.9	340.1	340.3	340.4	340.3	340.1	339.9	339.7	339.5	339.3	339.1
127.5°	366.3	366.1	365.9	365.7	365.9	366.1	366.3	366.5	366.4	366.1	365.8
130°	382.5	382.3	382.1	381.9	382.1	382.3	382.5	382.7	382.6	382.2	381.8
132.5°	397.7	397.4	397.1	396.9	397.1	397.4	397.7	397.9	397.8	397.5	397.1
135°	420.5	420.2	419.9	419.6	419.9	420.2	420.5	420.8	420.8	420.5	420.2
137.5°	441.7	441.5	441.3	441.1	441.3	441.5	441.7	441.9	441.7	441.2	440.8
140°	454.5	454.3	454.1	453.9	454.1	454.3	454.5	454.7	454.6	454.2	453.8
142.5°	466.6	466.4	466.1	465.8	466.1	466.4	466.6	466.8	466.8	466.6	466.3
145°	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	483.9	483.7	483.5
147.5°	498.9	498.4	498.0	497.6	498.0	498.4	498.9	499.3	499.5	499.3	499.1
150°	508.6	508.3	508.0	507.7	508.0	508.3	508.6	508.9	508.9	508.7	508.5
152.5°	517.2	516.7	516.3	515.9	516.3	516.7	517.2	517.6	517.6	517.3	517.0
155°	528.9	528.3	527.7	527.3	527.7	528.3	528.9	529.4	529.5	529.0	528.6
157.5°	538.9	538.3	537.5	536.8	537.5	538.3	538.9	539.7	539.8	539.2	538.7
160°	544.9	544.2	543.6	542.9	543.6	544.2	544.9	545.5	545.5	545.0	544.4
162.5°	550.4	549.8	549.2	548.7	549.2	549.8	550.4	551.0	550.9	550.4	549.7
165°	557.5	556.9	556.3	555.6	556.3	556.9	557.5	558.2	558.2	557.4	556.7
167.5°	562.8	562.1	561.4	560.6	561.4	562.1	562.8	563.5	563.5	562.8	562.1
170°	565.9	565.1	564.4	563.6	564.4	565.1	565.9	566.7	566.7	565.9	565.1
172.5°	567.8	566.9	566.2	565.3	566.2	566.9	567.8	568.6	568.6	567.9	567.1
175°	570.1	569.4	568.6	567.9	568.6	569.4	570.1	570.9	570.9	570.2	569.6
177.5°	570.9	570.1	569.4	568.6	569.4	570.1	570.9	571.7	571.7	571.1	570.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	434.6	434.6	437.9	440.1	442.7	444.4	445.6	446.9	449.0	451.8	455.0
5°	409.7	410.6	415.5	420.3	424.9	428.9	432.2	436.1	440.9	446.9	453.5
7.5°	385.7	389.1	393.9	399.8	406.2	412.0	417.8	424.3	431.2	439.9	449.1
10°	370.2	373.9	379.8	387.4	394.2	401.0	408.2	415.2	423.8	434.1	446.0
12.5°	356.7	360.2	366.4	374.5	381.0	388.5	396.8	406.0	415.6	427.9	441.4
15°	337.9	342.1	349.6	353.5	363.4	372.4	380.1	393.2	405.6	418.3	433.9
17.5°	322.5	324.9	330.9	338.3	345.6	355.8	365.8	376.8	389.1	404.6	424.1
20°	312.0	314.0	320.6	328.3	336.2	345.4	354.4	365.4	379.2	395.7	416.8
22.5°	304.2	306.2	310.6	318.8	326.1	333.8	342.8	355.9	370.6	386.7	409.5
25°	292.7	294.0	296.9	303.5	310.0	318.6	326.5	338.8	353.9	372.9	395.7
27.5°	281.8	283.1	285.5	290.2	296.4	303.3	312.0	322.3	337.7	358.3	382.5
30°	275.3	275.6	277.8	282.2	287.5	293.1	301.0	312.9	327.4	348.3	373.7
32.5°	269.8	268.9	270.4	273.7	278.8	284.6	291.1	302.7	316.7	337.1	363.4
35°	260.2	259.8	259.1	261.9	266.4	270.7	276.4	285.2	301.0	320.2	347.6
37.5°	250.5	249.4	248.3	249.6	253.0	257.6	262.5	270.3	284.0	305.0	331.3
40°	243.3	242.4	241.8	241.3	244.4	248.7	252.5	260.0	272.7	292.7	318.6
42.5°	235.4	234.9	234.0	233.4	235.9	239.3	243.2	249.8	262.5	281.3	305.8
45°	222.6	222.3	221.8	221.3	222.9	225.9	229.0	233.8	244.9	263.1	285.2
47.5°	208.5	207.9	208.1	207.4	208.9	210.9	213.1	218.3	228.8	243.6	259.8
50°	198.3	198.0	198.0	198.0	198.5	201.0	202.9	206.9	216.5	231.2	242.9
52.5°	188.6	187.7	187.7	188.0	188.9	190.4	191.6	196.0	204.3	216.5	227.1
55°	173.4	171.7	171.3	171.7	172.4	173.7	175.0	178.5	185.8	194.7	201.0
57.5°	156.7	155.7	155.1	155.2	155.6	156.7	157.7	161.5	167.2	171.9	175.9
60°	145.0	145.3	143.4	143.8	143.8	144.7	146.3	148.6	153.4	156.7	160.7
62.5°	133.8	133.3	132.7	132.1	132.1	132.4	134.5	136.4	140.5	142.2	145.2
65°	116.6	116.6	115.3	115.7	115.9	114.4	115.5	117.7	120.4	121.0	123.9
67.5°	99.2	98.5	97.7	97.1	97.1	97.0	97.6	98.6	100.6	100.9	103.0
70°	87.2	86.7	86.5	85.9	85.0	86.1	85.4	86.5	87.7	87.8	89.2
72.5°	75.6	75.1	74.7	74.1	73.7	73.6	73.6	74.9	75.7	75.4	76.8
75°	59.1	58.6	58.2	57.1	57.1	56.5	56.6	57.5	58.4	57.8	59.1
77.5°	43.4	42.0	41.9	42.2	41.5	41.7	41.4	41.3	41.7	41.7	42.9
80°	33.4	31.9	32.2	32.0	31.9	31.6	31.2	31.4	31.6	31.9	32.5
82.5°	24.0	23.9	23.5	23.5	23.2	22.6	22.4	22.8	23.0	22.9	23.4
85°	12.3	11.6	12.1	11.9	12.1	11.9	11.2	11.2	11.6	11.4	11.9
87.5°	5.8	5.7	5.3	5.3	4.8	4.7	4.3	4.3	4.3	4.1	4.3
90°	10.6	10.2	9.0	7.7	6.5	5.3	4.1	3.2	2.3	1.3	0.4
92.5°	11.4	10.8	9.9	9.0	8.1	7.2	6.8	7.1	7.4	7.6	7.9
95°	13.8	13.1	12.1	11.0	10.0	9.0	10.4	14.2	18.1	22.0	25.8
97.5°	14.4	13.7	20.5	27.1	33.9	40.7	45.0	46.8	48.4	50.1	51.9
100°	14.7	13.9	28.7	43.4	58.1	72.7	79.1	77.2	75.3	73.4	71.5
102.5°	25.5	27.9	43.9	59.9	76.0	92.0	99.3	98.0	96.6	95.3	93.9
105°	76.1	92.7	101.2	109.7	118.1	126.6	130.4	129.3	128.3	127.2	126.2
107.5°	157.8	169.9	168.6	167.3	166.0	164.7	163.5	162.7	161.9	161.1	160.2
110°	187.8	191.0	189.9	188.9	187.8	186.8	186.0	185.2	184.5	183.7	182.9



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	212.4	212.4	211.3	210.3	209.2	208.2	207.4	206.6	205.9	205.3	204.6
115°	244.0	243.1	242.2	241.4	240.5	239.7	238.9	238.4	237.8	237.2	236.7
117.5°	273.6	272.9	272.5	272.0	271.5	271.2	270.6	269.8	269.2	268.5	267.8
120°	292.9	292.2	291.9	291.6	291.3	291.1	290.5	289.6	288.8	287.9	287.1
122.5°	312.0	311.5	311.1	310.8	310.5	310.1	309.5	308.9	308.1	307.5	306.8
125°	338.9	338.7	338.4	338.0	337.6	337.2	336.7	335.9	335.2	334.4	333.7
127.5°	365.5	365.2	364.8	364.3	363.8	363.4	362.8	362.0	361.3	360.5	359.8
130°	381.4	381.1	380.8	380.4	380.0	379.7	379.1	378.3	377.6	376.8	376.1
132.5°	396.7	396.3	396.1	395.8	395.5	395.1	394.6	393.9	393.1	392.4	391.6
135°	419.9	419.6	419.2	418.9	418.5	418.1	417.6	417.1	416.5	415.9	415.4
137.5°	440.4	439.9	439.7	439.5	439.3	439.0	438.6	437.9	437.2	436.5	435.7
140°	453.5	453.1	452.8	452.5	452.2	451.9	451.6	451.0	450.4	449.9	449.3
142.5°	465.9	465.6	465.3	465.1	464.8	464.5	464.1	463.5	463.0	462.4	461.8
145°	483.3	483.1	483.0	482.8	482.6	482.4	482.0	481.4	480.7	480.0	479.4
147.5°	498.9	498.7	498.5	498.3	498.1	497.9	497.6	497.2	496.7	496.3	495.9
150°	508.3	508.1	507.9	507.7	507.6	507.4	507.2	506.9	506.6	506.3	506.1
152.5°	516.6	516.3	516.1	516.0	515.9	515.9	515.8	515.6	515.5	515.3	515.2
155°	528.1	527.6	527.5	527.4	527.4	527.3	527.4	527.5	527.6	527.8	528.0
157.5°	538.1	537.5	537.6	537.7	537.8	537.9	538.0	538.0	538.0	538.0	538.1
160°	543.8	543.3	543.4	543.5	543.6	543.7	543.8	543.8	543.9	544.0	544.1
162.5°	549.0	548.4	548.5	548.6	548.7	548.7	548.9	549.2	549.4	549.7	549.9
165°	555.9	555.2	555.3	555.3	555.4	555.5	555.7	556.0	556.3	556.6	556.9
167.5°	561.4	560.6	560.6	560.6	560.6	560.6	560.8	561.2	561.6	561.9	562.3
170°	564.4	563.6	563.6	563.6	563.6	563.6	563.8	564.2	564.6	565.0	565.3
172.5°	566.4	565.6	565.6	565.5	565.4	565.3	565.5	566.0	566.5	566.9	567.3
175°	568.9	568.3	568.2	568.1	568.0	567.9	568.1	568.5	569.0	569.5	570.0
177.5°	569.9	569.3	569.2	569.1	569.1	569.0	569.1	569.5	569.9	570.2	570.6
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	456.0	456.9	459.9	462.0	464.5	465.9	467.2	468.3	469.8	470.0	475.1
5°	458.1	462.4	470.1	475.8	482.9	490.5	495.8	498.2	504.6	509.8	520.4
7.5°	457.5	466.8	478.4	490.5	503.3	515.3	525.7	538.0	546.7	559.9	572.8
10°	456.9	469.5	484.4	499.7	517.7	534.4	549.4	566.1	579.9	598.1	613.7
12.5°	455.3	470.5	491.3	509.4	531.3	554.3	576.5	597.9	610.1	640.5	654.8
15°	451.5	469.5	495.4	523.0	553.1	580.3	608.4	630.8	667.0	693.6	710.6
17.5°	444.0	469.2	499.9	533.3	569.9	605.8	637.6	671.6	710.0	742.2	776.5
20°	440.5	468.2	502.4	539.3	577.3	617.9	654.1	694.9	736.9	768.5	812.5
22.5°	433.9	465.3	502.2	543.3	583.9	625.9	668.4	709.5	758.0	801.5	843.4
25°	423.4	458.5	496.7	542.6	590.2	632.4	683.2	737.8	788.2	844.3	886.0
27.5°	412.2	449.7	488.0	530.7	581.9	632.0	695.8	757.5	819.3	867.6	898.5
30°	403.6	440.1	479.6	522.6	573.3	632.8	704.2	771.6	831.8	873.3	890.6
32.5°	394.3	431.2	466.2	511.3	565.4	632.3	709.5	779.9	832.5	860.1	856.7
35°	379.7	410.6	444.7	488.1	551.8	628.4	712.6	780.6	812.8	806.9	762.1
37.5°	358.5	384.7	418.1	465.7	536.0	620.3	706.3	757.4	755.4	707.1	642.2
40°	345.4	367.6	399.8	449.9	523.7	615.0	696.7	729.9	701.8	634.3	556.7
42.5°	328.2	348.6	380.9	432.3	510.2	604.4	678.3	687.9	632.9	555.3	484.1
45°	301.5	319.5	352.9	406.0	489.8	581.0	633.3	609.7	535.7	455.6	401.4
47.5°	272.8	291.5	323.6	378.2	460.5	545.9	570.8	520.8	444.9	379.8	330.1
50°	254.7	272.7	304.2	359.2	440.7	517.1	527.4	462.9	393.0	335.9	295.1
52.5°	236.5	253.4	284.3	339.6	417.5	483.7	477.4	411.6	347.4	298.7	266.6
55°	209.2	225.3	254.7	306.5	377.5	429.9	406.9	344.1	291.0	253.2	228.8
57.5°	184.9	200.3	225.6	272.5	334.1	370.2	340.9	287.9	245.7	216.6	198.5
60°	168.4	182.0	206.2	249.7	303.2	330.6	301.7	255.0	219.3	196.0	179.8
62.5°	152.8	164.7	187.0	226.5	273.1	296.1	266.7	227.2	196.9	176.3	162.4
65°	129.1	139.9	159.7	190.4	228.6	243.9	218.7	186.6	163.2	147.8	138.6
67.5°	107.5	116.7	133.7	157.9	186.1	197.2	178.0	153.2	135.4	123.1	115.8
70°	93.1	101.0	114.4	135.3	160.7	169.3	151.3	130.8	117.9	108.0	101.2
72.5°	81.0	86.8	99.0	115.1	136.3	143.1	130.5	112.6	100.6	93.1	87.7
75°	61.7	66.5	74.5	87.4	102.1	106.0	96.6	85.4	77.3	72.0	67.9
77.5°	44.5	48.1	53.7	61.7	71.9	75.5	69.6	62.0	56.1	52.6	50.2
80°	33.6	36.5	41.3	47.9	54.0	56.0	52.5	46.8	42.6	40.6	38.6
82.5°	24.8	26.4	29.3	33.8	38.0	40.3	37.4	33.9	31.7	29.9	29.1
85°	12.5	13.4	14.7	16.5	19.1	20.0	18.9	18.0	16.7	15.6	15.6
87.5°	4.8	5.0	5.7	6.3	7.2	8.0	8.0	7.9	8.0	7.9	7.8
90°	1.3	2.3	3.2	4.1	5.3	6.5	7.7	9.0	10.2	10.6	10.9
92.5°	7.6	7.4	7.1	6.8	7.2	8.1	9.0	9.9	10.8	11.4	12.1
95°	22.0	18.1	14.2	10.4	9.0	10.0	11.0	12.1	13.1	13.8	14.4
97.5°	50.1	48.4	46.8	45.0	40.7	33.9	27.1	20.5	13.7	14.4	15.2
100°	73.4	75.3	77.2	79.1	72.7	58.1	43.4	28.7	13.9	14.7	15.5
102.5°	95.3	96.6	98.0	99.3	92.0	76.0	59.9	43.9	27.9	25.5	23.2
105°	127.2	128.3	129.3	130.4	126.6	118.1	109.7	101.2	92.7	76.1	59.4
107.5°	161.1	161.9	162.7	163.5	164.7	166.0	167.3	168.6	169.9	157.8	145.5
110°	183.7	184.5	185.2	186.0	186.8	187.8	188.9	189.9	191.0	187.8	184.7



TEST NUMBER: P332090-830

CATALOG NUMBER: S123DIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	205.3	205.9	206.6	207.4	208.2	209.2	210.3	211.3	212.4	212.4	212.4
115°	237.2	237.8	238.4	238.9	239.7	240.5	241.4	242.2	243.1	244.0	245.0
117.5°	268.5	269.2	269.8	270.6	271.2	271.5	272.0	272.5	272.9	273.6	274.4
120°	287.9	288.8	289.6	290.5	291.1	291.3	291.6	291.9	292.2	292.9	293.7
122.5°	307.5	308.1	308.9	309.5	310.1	310.5	310.8	311.1	311.5	312.0	312.5
125°	334.4	335.2	335.9	336.7	337.2	337.6	338.0	338.4	338.7	338.9	339.1
127.5°	360.5	361.3	362.0	362.8	363.4	363.8	364.3	364.8	365.2	365.5	365.8
130°	376.8	377.6	378.3	379.1	379.7	380.0	380.4	380.8	381.1	381.4	381.8
132.5°	392.4	393.1	393.9	394.6	395.1	395.5	395.8	396.1	396.3	396.7	397.1
135°	415.9	416.5	417.1	417.6	418.1	418.5	418.9	419.2	419.6	419.9	420.2
137.5°	436.5	437.2	437.9	438.6	439.0	439.3	439.5	439.7	439.9	440.4	440.8
140°	449.9	450.4	451.0	451.6	451.9	452.2	452.5	452.8	453.1	453.5	453.8
142.5°	462.4	463.0	463.5	464.1	464.5	464.8	465.1	465.3	465.6	465.9	466.3
145°	480.0	480.7	481.4	482.0	482.4	482.6	482.8	483.0	483.1	483.3	483.5
147.5°	496.3	496.7	497.2	497.6	497.9	498.1	498.3	498.5	498.7	498.9	499.1
150°	506.3	506.6	506.9	507.2	507.4	507.6	507.7	507.9	508.1	508.3	508.5
152.5°	515.3	515.5	515.6	515.8	515.9	515.9	516.0	516.1	516.3	516.6	517.0
155°	527.8	527.6	527.5	527.4	527.3	527.4	527.4	527.5	527.6	528.1	528.6
157.5°	538.0	538.0	538.0	538.0	537.9	537.8	537.7	537.6	537.5	538.1	538.7
160°	544.0	543.9	543.8	543.8	543.7	543.6	543.5	543.4	543.3	543.8	544.4
162.5°	549.7	549.4	549.2	548.9	548.7	548.7	548.6	548.5	548.4	549.0	549.7
165°	556.6	556.3	556.0	555.7	555.5	555.4	555.3	555.3	555.2	555.9	556.7
167.5°	561.9	561.6	561.2	560.8	560.6	560.6	560.6	560.6	560.6	561.4	562.1
170°	565.0	564.6	564.2	563.8	563.6	563.6	563.6	563.6	563.6	564.4	565.1
172.5°	566.9	566.5	566.0	565.5	565.3	565.4	565.5	565.6	565.6	566.4	567.1
175°	569.5	569.0	568.5	568.1	567.9	568.0	568.1	568.2	568.3	568.9	569.6
177.5°	570.2	569.9	569.5	569.1	569.0	569.1	569.1	569.2	569.3	569.9	570.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	476.9	477.1	479.0	480.4	479.8	480.6	481.0
5°	521.0	529.0	533.1	536.2	536.4	536.7	538.4
7.5°	583.6	592.1	598.3	607.8	610.5	613.7	612.8
10°	629.3	641.9	652.6	658.3	664.5	673.4	666.2
12.5°	672.0	694.2	710.6	719.4	725.2	727.0	723.5
15°	742.4	771.4	786.9	786.6	806.3	814.8	801.4
17.5°	806.9	833.7	855.2	866.1	882.6	886.2	884.6
20°	846.5	875.7	892.4	911.3	919.8	927.5	928.8
22.5°	880.5	906.8	924.7	940.4	947.5	951.2	953.4
25°	915.7	936.3	947.1	952.5	954.5	954.0	951.2
27.5°	913.2	914.8	903.0	891.4	880.9	869.2	865.2
30°	889.5	871.1	838.1	819.4	792.0	770.2	779.1
32.5°	827.2	790.4	753.5	712.7	678.9	669.3	659.6
35°	706.0	641.4	603.6	559.7	542.2	524.6	512.5
37.5°	571.1	521.2	476.4	447.7	430.1	419.0	413.0
40°	493.8	448.8	411.9	388.6	375.2	362.8	361.0
42.5°	432.2	390.3	362.6	344.0	331.2	325.8	322.0
45°	353.9	324.8	306.1	292.9	284.4	281.1	276.6
47.5°	299.6	279.0	264.9	256.0	249.5	247.0	246.8
50°	269.2	252.0	241.8	234.7	229.7	228.8	225.3
52.5°	246.4	231.5	223.5	217.4	213.7	211.2	210.2
55°	213.9	204.0	196.7	193.2	190.4	187.9	187.9
57.5°	187.1	178.9	174.1	171.1	170.2	168.5	167.4
60°	170.6	163.6	159.9	157.2	155.4	155.7	153.7
62.5°	154.5	149.9	146.3	143.7	141.6	141.7	141.8
65°	131.5	128.0	125.4	124.5	123.2	121.7	122.1
67.5°	111.5	108.2	106.1	104.6	104.2	103.3	104.6
70°	97.1	94.6	93.1	91.8	91.3	91.5	92.7
72.5°	83.9	82.2	81.2	80.6	79.6	79.6	80.4
75°	65.9	64.6	63.7	63.1	62.8	62.8	62.8
77.5°	48.4	48.1	47.7	46.8	46.8	47.0	47.0
80°	38.2	37.5	37.3	36.9	36.2	35.8	36.9
82.5°	28.6	27.9	27.7	27.6	26.6	26.5	27.4
85°	15.4	14.7	14.9	14.7	14.7	14.5	14.5
87.5°	7.7	7.6	7.4	7.7	7.5	7.4	7.8
90°	11.3	11.7	12.0	12.2	12.3	12.5	12.7
92.5°	12.6	13.3	13.6	13.8	13.9	13.9	14.0
95°	15.1	15.7	16.1	16.1	16.1	16.1	16.1
97.5°	15.9	16.7	17.1	17.2	17.2	17.3	17.4
100°	16.2	17.0	17.4	17.5	17.6	17.7	17.8
102.5°	20.8	18.6	17.4	17.6	17.8	17.9	18.1
105°	42.8	26.1	17.9	18.1	18.3	18.5	18.7
107.5°	133.4	121.1	108.8	96.1	83.6	71.1	58.5
110°	181.6	178.5	170.3	156.8	143.4	129.9	116.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.4	212.5	211.1	208.3	205.5	202.6	199.8
115°	245.9	246.9	247.5	247.9	248.3	248.6	249.0
117.5°	275.1	275.9	276.3	276.4	276.4	276.5	276.6
120°	294.5	295.2	295.6	295.6	295.6	295.6	295.6
122.5°	313.1	313.6	313.9	314.0	314.1	314.1	314.2
125°	339.3	339.5	339.7	339.9	340.1	340.3	340.4
127.5°	366.1	366.4	366.5	366.3	366.1	365.9	365.7
130°	382.2	382.6	382.7	382.5	382.3	382.1	381.9
132.5°	397.5	397.8	397.9	397.7	397.4	397.1	396.9
135°	420.5	420.8	420.8	420.5	420.2	419.9	419.6
137.5°	441.2	441.7	441.9	441.7	441.5	441.3	441.1
140°	454.2	454.6	454.7	454.5	454.3	454.1	453.9
142.5°	466.6	466.8	466.8	466.6	466.4	466.1	465.8
145°	483.7	483.9	484.0	484.0	484.0	484.0	484.0
147.5°	499.3	499.5	499.3	498.9	498.4	498.0	497.6
150°	508.7	508.9	508.9	508.6	508.3	508.0	507.7
152.5°	517.3	517.6	517.6	517.2	516.7	516.3	515.9
155°	529.0	529.5	529.4	528.9	528.3	527.7	527.3
157.5°	539.2	539.8	539.7	538.9	538.3	537.5	536.8
160°	545.0	545.5	545.5	544.9	544.2	543.6	542.9
162.5°	550.4	550.9	551.0	550.4	549.8	549.2	548.7
165°	557.4	558.2	558.2	557.5	556.9	556.3	555.6
167.5°	562.8	563.5	563.5	562.8	562.1	561.4	560.6
170°	565.9	566.7	566.7	565.9	565.1	564.4	563.6
172.5°	567.9	568.6	568.6	567.8	566.9	566.2	565.3
175°	570.2	570.9	570.9	570.1	569.4	568.6	567.9
177.5°	571.1	571.7	571.7	570.9	570.1	569.4	568.6
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0

(END OF REPORT)